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WESTERN AUSTRALIA

State # 395

#### OFFICE OF THE MINISTER FOR THE ENVIRONMENT

# STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED (PURSUANT TO THE PROVISIONS OF THE ENVIRONMENTAL PROTECTION ACT 1986)

## EAST SPAR OFF-SHORE GAS FIELD DEVELOPMENT VARANUS ISLAND, NORTH WEST SHELF (918)

#### WESTERN MINING CORPORATION LIMITED

This proposal may be implemented subject to the following conditions:

1 Proponent Commitments

The proponent has made a number of environmental management commitments in order to protect the environment.

1-1 In implementing the proposal, the proponent shall fulfil the commitments made in the Consultative Environmental Review and in response to issues raised following public submissions; provided that the commitments are not inconsistent with the conditions or procedures contained in this statement. These commitments are consolidated in Environmental Protection Authority Bulletin 787 (Appendix 3).

A schedule of those environmental management commitments (1 August 1995) which will be audited by the Department of Environmental Protection is attached.

2 Implementation

Changes to the proposal which are not substantial may be carried out with the approval of the Minister for the Environment.

- 2-1 Subject to these conditions, the manner of detailed implementation of the proposal shall conform in substance with that set out in any designs, specifications, plans or other technical material submitted by the proponent to the Environmental Protection Authority with the proposal.
- 2-2 Where, in the course of the detailed implementation referred to in condition 2-1, the proponent seeks to change the designs, specifications, plans or other technical material submitted to the Environmental Protection Authority in any way that the Minister for the Environment determines, on the advice of the Environmental Protection Authority, is not substantial, those changes may be effected.
- 3 Varanus Island Environment
- 3-1 The proponent shall protect flora, fauna, landforms and groundwater on Varanus Island.

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- 3-2 To achieve the objective of condition 3-1, prior to any ground-disturbing activities, the proponent shall prepare an Environmental Management Programme (Varanus Island) to the requirements of the Department of Environmental Protection, the Department of Conservation and Land Management and the Department of Minerals and Energy (see procedure 3).
- 3-3 The proponent shall implement the Environmental Management Programme (Varanus Island) required by condition 3-2.

#### 4 Off-shore Environment

- 4-1 The proponent shall protect the off-shore environment from significant environmental impacts resulting from the project.
- 4-2 To achieve the objective of condition 4-1, prior to the commencement of pipeline laying, the proponent shall prepare an Environmental Management Programme (Off-shore Environment) to the requirements of the Department of Environmental Protection, the Department of Conservation and Land Management and the Department of Minerals and Energy.
- 4-3 The proponent shall implement the Environmental Management Programme (Off-shore Environment) required by condition 4-2.

#### 5 "Produced" Water Disposal

As extraction of gas/condensate from the gas field proceeds, quantities of so-called "produced" water will require disposal in an environmentally sensitive manner.

- 5-1 The proponent shall avoid disposing of "produced" water in such a way that a significant environmental impact occurs, or significant groundwater contamination occurs.
- 5-2 In the event that alternative means of disposal of "produced" water are to be utilised, the proponent shall prepare an Environmental Management Programme for Produced Water, to the requirements of the Department of Environmental Protection, the Department of Conservation and Land Management and the Department of Minerals and Energy. The Environmental Management Programme for Produced Water shall be prepared at least six months prior to commencement of construction of alternative disposal facilities and shall be made publicly available as soon as practicable.
- 5-3 The proponent shall implement the Environmental Management Programme for Produced Water required by condition 5-2.

#### 6 Liaison

6-1 The proponent shall liaise with the operator of the adjacent Harriet Joint Venture Project to ensure best practice environmental management of Varanus Island and adjacent waters, to the requirements of the Department of Environmental Protection on advice of the Department of Conservation and Land Management and the Department of Minerals and Energy.

#### 7 Decommissioning

- 7-1 The proponent shall carry out decommissioning of the project, removal of the plant and installations and rehabilitation of the site and its environs.
- 7-2 At least six months prior to decommissioning, the proponent shall prepare a decommissioning and rehabilitation plan to achieve the objectives of condition 7-1.

7-3 The proponent shall implement the plan required by condition 7-2.

#### 8 Proponent

The environmental conditions legally apply to the nominated proponent.

8-1 No transfer of ownership, control or management of the project which would give rise to a need for the replacement of the proponent shall take place until the Minister for the Environment has advised the proponent that approval has been given for the nomination of a replacement proponent. Any request for the exercise of that power of the Minister shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the project in accordance with the conditions and procedures set out in the statement.

#### 9 Time Limit on Approval

The environmental approval for the proposal is limited.

9-1 If the proponent has not substantially commenced the project within five years of the date of this statement, then the approval to implement the proposal as granted in this statement shall lapse and be void. The Minister for the Environment shall determine any question as to whether the project has been substantially commenced.

Any application to extend the period of five years referred to in this condition shall be made, before the expiration of that period, to the Minister for the Environment.

Where the proponent demonstrates to the requirements of the Minister for the Environment on advice of the Department of Environmental Protection that the environmental parameters of the proposal have not changed significantly, then the Minister may grant an extension not exceeding five years.

#### 10 Compliance Auditing

To help determine environmental performance, periodic reports on progress in implementation of the proposal are required.

10-1 The proponent shall submit periodic Progress and Compliance Reports, in accordance with an audit programme prepared by the Department of Environmental Protection in consultation with the proponent.

#### Procedure

- The Department of Environmental Protection is responsible for verifying compliance with the conditions contained in this statement and for issuing formal clearance of conditions with the exception of conditions stating that the proponent shall meet the requirements of either the Minister for the Environment or any other government agency.
- If the Department of Environmental Protection, other government agency or proponent is in dispute concerning compliance with the conditions contained in this statement, that dispute will be determined by the Minister for the Environment.
- An Environmental Management Programme has already been prepared by the operator of the Harriet Joint Venture Project which covers Varanus Island and adjacent waters and will form the minimum requirement for the land component and adjacent waters for the East Spar Off-shore Gas Field proposal. Accordingly, the Environmental Management Programme required by condition 3-2 can be based upon the existing Harriet Joint Venture Environmental Management Programme.

#### Note

The proponent is required to apply for a Works Approval for this project under the provisions of Part V of the Environmental Protection Act. Additionally, it will be necessary either for the proponent to apply for a separate operating licence or for the facility to be licensed through an amendment to the existing Harriet Joint Venture operating licence.

Hon. Peter Foss, MLC MINISTER FOR THE ENVIRONMENT

0 8 SEP 1995

### Schedule of Environmental Management Commitments

which will be audited

by the Department of Environmental Protection

1 August 1995

EAST SPAR OFF-SHORE GAS FIELD

DEVELOPMENT, VARANUS ISLAND

NORTH WEST SHELF (918)

WESTERN MINING CORPORATION LIMITED

#### **Emergency Response Issues**

- 1 The Oil Spill Contingency Plan will be updated to incorporate the East Spar project to the satisfaction of the Department of Minerals and Energy prior to any work commencing on the project.
- 2 WMC will develop refuelling procedures consistent with industry best practice prior to commencement of the project.

#### **Produced Water**

- Before produced formation water reaches volumes which exceed the capacity of existing Varanus Island facilities, WMC will install an appropriate water treatment plant to the satisfaction of the Department of Environmental Protection.
- 4 An environmental management plan will be prepared in consultation with CALM & Apache Energy, at least twelve months before the change in disposal method for produced water is predicted, for approval by the DEP and implemented accordingly.

#### **Onshore Construction**

- 5 Ensure the contractors follow the environmental criteria and safeguards required by the proponent and regulatory authorities.
- Waste generated during construction will be disposed of in a manner conforming to State and local regulations and utilising strategies and procedures operating the respective areas.
- Following completion of plant construction and pipeline laying, disturbed landforms eg. sand dunes, will, wherever practical, be restored to the previous form, to the satisfaction of the Department of Environmental Protection.
- 8 Damage to landforms, flora and fauna will be kept to a minimum by ensuring that all constructions take up the minimum area in line with safety requirements and utilising existing disturbed areas where possible.
- 9 Topsoil, where removed, will be stockpiled to one side of the pipeline corridor and replaced after construction where possible.
- 10 Before construction commences, WMC will consult with CALM and Apache Energy on drainage design for the proposed facilities on Varanus Island. Following construction, WMC will monitor the outfall for the storm water drainage.
- All process facilities will be placed within the existing Harriet Joint Venture lease.
- WMC will liaise with Apache Energy and CALM on dust suppression techniques during the construction phase and control measures will be implemented accordingly.
- When the facilities/structures to be installed on Varanus Island by WMC are no longer required they will be removed. The area that was covered by the WMC facilities will be returned to the condition that it was when WMC first commenced construction. This work will be done in consultation with CALM and implemented accordingly, to the satisfaction of the Department of Environmental Protection.

- The pipeline will come ashore at a site within the existing Harriet Joint Venture Pipeline Licence area in a manner which minimises environmental impact.
- 15 A close out audit will be conducted after completion of construction in consultation with CALM, DEP, & DME and Apache Energy.

#### Off-shore Construction

- Timing of the construction of the submarine pipeline in the vicinity of Varanus Island will be planned to avoid impact on any coral spawning in the area adjacent to Varanus Island.
- Prior to construction, a survey of marine habitats will be taken along the pipeline route in the vicinity of Varanus Island to map the pipeline route and ensure that no sensitive marine assemblages will be adversely impacted during construction of the pipeline and to ensure the selected pipeline route will optimise the separation between the pipeline and sensitive marine resources.
- 18 WMC will liaise with W A Museum personnel to route the pipeline so that it avoids areas that contain any identified shipwrecks, or highly significant cultural sites and ensure construction activities do not impinge upon them.
- 19 The pipeline route will be selected to avoid any coral patch reef areas.
- 20 Pipeline stringing will occur offshore from a pipelaying barge, except for a short section adjacent to and on Varanus Island.
- 21 Before the pipeline is installed, WMC will consult with CALM & DEP on the final location of the pipeline crossing point on Varanus Island and implement management strategies accordingly.

#### Operation & Management

- All operators and construction workers will be given a full induction designed to provide an understanding and appreciation of the need for sound environment, safety and operations management when working on Varanus Island. The program will clearly explain prohibited areas on Varanus Island and the procedures to follow that will ensure flora and fauna on Varanus Island are protected.
- Before the plant commences operations, WMC will develop a scientifically rigorous environmental monitoring program within a broader environmental management framework in consultation with CALM, DEP, DME & Apache Energy.
- WMC will abide by the existing Environmental management plan in place for Varanus Island. WMC will liaise with Apache, DME and CALM on the implementation of the existing plan requirements.
- Strict quarantine procedures currently in place for all staff, goods and materials arriving on Varanus Island will be followed during every phase of the East Spar project to ensure exotic species of flora or fauna do not reach the island.
- A corrosion management system will be put in place to ensure that the 20 year design life of the pipeline will be achieved. A low pressure shut down system will be provided which will shut down the operation immediately in the event that leakage from the pipeline is suspected.

#### Other Issues

- Details of volume, composition and concentration of hydrostatic test water will be supplied to the Department of Environmental Protection, to the requirements of the Department of Environmental Protection.
- WMC will use the existing fully enclosed shielded flare on Varanus Island in order to minimise the impact of light from the flare on nesting turtles and Wedge Tailed Shearwaters.
- In addition to the existing flare, an emergency flare tower will be installed. The ignition of this flare will either be electronic or by a shielded pilot light.
- 30 Clearing of the pipeline will take place from the East Spar location to Varanus Island. The water will be discharged into the bunded area on Varanus Island and allowed to evaporate. Apache Energy will be informed of the composition and quantity of water prior to discharge.
- 31 Eco-toxicology testing of control fluid will be carried out before the fluid is used. Results of the tests will be forwarded to the DEP for information. Control fluids will be selected so as to minimise environmental impacts.
- WMC will consult with CALM during the design stage on lighting for the plant. Where possible plant lighting will operate on timer devices and be of a type that minimises light visible outside the area to be illuminated. Lighting design will have to take in operational safety considerations.